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DIRECTED ENERGY SCIENTIST'S CAREER HONORED

KIRTLAND AIR FORCE BASE, N.M. – One of the Air Force's most senior scientists, Dr. Robert Q. Fugate, was presented the Air Force's Outstanding Civilian Career Service Award at a ceremony here today, marking his retirement after 35 years of federal service.

Fugate, the technical director at the Air Force Research Laboratory's Starfire Optical Range (SOR), received the award in recognition of his accomplishments and contributions to the Air Force for a federal civilian career that began on December 1, 1970.

Fugate has served as the technical director and senior scientist at the SOR since his arrival in 1979. He transformed the SOR from a small outpost with five employees working on a single project into a division of 500 government and contractor personnel working on 30 research projects worth \$500 million. The division has major facilities at the Kirtland Air Force Base and in Maui, Hawaii.

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The Ohio native spent his career conducting research on the physics of propagation of light through atmospheric turbulence and a technique called laser guidestar adaptive optics that corrects distortion caused by the atmosphere. His research has resulted in significant advances in military, space surveillance and satellite diagnostic capabilities and has enabled laser propagation over long distances.

The imaging capabilities of adaptive optics have been lauded by the scientific community as igniting a revolution in ground-based optical astronomy. Nearly every major astronomical telescope in the world now has or is building an adaptive optical system based on the techniques developed at the SOR. The largest astronomical telescopes in operation today using laser guidestar adaptive optics have produced new scientific discoveries otherwise unachievable, even surpassing some of the capabilities of the Hubble Space Telescope.

Fugate's achievements are recognized internationally as the ultimate in atmospheric compensation techniques, and his program was recognized seven times consecutively as "world class," the highest rating assigned by the Air Force Scientific Advisory Board.

Throughout his career, Fugate received numerous prestigious awards, including the first Distinguished Presidential Rank Award for Senior Professionals in 2003, presented by President George W. Bush. He was also elected to the National Academy of Engineering in 2004, a prestige achieved by very few government employees.

Other awards included the Progress Medal from the Photographic Society of America in 2000, the Harold Brown Award in 1999, the DoD Distinguished Civilian Service Award in 1997, and Fellowships in the Air Force Research Laboratory in 1996 and the Optical Society of America in 1994.

Fugate received his doctorate degree in physics from Iowa State University in 1970.